

CLAIM AMENDMENTS:

Please amend Claims 1 and 6 and add new Claim 12 as follows:

1. (Currently Amended) A field effect transistor comprising:

a substrate comprising including a source region and a drain region;

an insulating layer arranged on the substrate; and

a porous body which has pillar-shaped pores arranged on the insulating layer, so that a detected material is introduced in the pores; wherein an average pore diameter of the pillar-shaped pores is 50 nm or less said body has a mean pore density of 1.5×10^{11} pores/cm² or more.

2. (Cancelled)

3. (Previously Amended) The field-effect transistor according to Claim 1, characterized in that the porous body is composed of an insulating material or a semiconductor material.

4. (Previously Amended) The field-effect transistor according to Claim 3, characterized in that the porous body includes a semiconductor material having silicon, germanium, or silicon and germanium as a main component.

5. (Original) The field-effect transistor according to Claim 3, characterized in that the insulating material is a material which uses silicon oxide as a main component.

6. (Currently Amended) The field-effect transistor according to Claim 1, characterized in that average pore diameter of the pillar-shaped pores is 20 nm or less, and mean pore density is 1.5×10^{11} pores/cm² or more.

7. (Previously Amended) The field-effect transistor according to Claim 1, having on surfaces of the pillar-shaped pores a detection material for detecting a specific said detected material.

8. (Original) The field-effect transistor according to Claim 7, characterized in that the detection material is a biomaterial.

9. (Previously Amended) The field-effect transistor according to Claim 6, characterized in that an electric charge state of the porous body changes when the detected material contacts the porous body.

10.-11. (Cancelled)

12. (New) The field-effect transistor according to Claim 1, characterized in that average pore diameter of the pillar-shaped pores is 50 nm or less.